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RECORDED

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A.D. 1887, 15*th* JULY. N° 9950.

COMPLETE SPECIFICATION.

An Improved Method of Preserving Fruit, Vegetables, and other Articles of Food.

We, LUDWIG STOLLWERCK, and CARL STOLLWERCK, of the Firm of Gebr. Stollwerck, of Cologne-on-the-Rhine, in the Empire of Germany, Manufacturers to the Court and FERDINAND BAUMER of Vienna in the Empire of Austria do hereby declare the nature of this Invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement :—

Our Invention relates to an improved method of preserving, in glass jars, fruit, vegetables and similar articles of food, said method being as follows, that is to say ; the fruit or other articles of food, while in a hot state are put into glass jars provided for their reception and which may be of the usual or any convenient form and construction, or the fruit or other articles of food may be steamed within the said jars, and the latter being thus heated, are then, and while yet in a hot state, covered up by a plate or disc of glass or other suitable material entirely impervious to air, and inflexible, the said disc being immediately thereafter sealed upon the upper surface of the jar's neck by means of any suitable cement so as to close the jar and make it completely air-tight.

When the contents of the jar thus closed become cool, a vacuum, or partial vacuum, sufficient to prevent the contents of the jar from spoiling, is formed below the said solid and impervious plate or disc. The methods of preserving fruit and other articles of food as heretofore employed did not prevent the contents of the jars from spoiling for the following reason ; the vacuum, or partial vacuum, after boiling or heating the contents of the jar, would be removed either in consequence of the elastic covering (such as parchment and the like) being drawn or sucked and "bulged" into the jar by reason of the rarefaction of the air below it, thus nearly, or entirely restoring the former density of the atmospheric air, or the porosity of the materials used for such coverings (such as cork, tin, etc.) or the fact that the rims thereof were not at once sealed or cemented thoroughly, would admit atmospheric air into the jar, whereby the vacuum, or partial vacuum would be likewise removed again to the disadvantage of the fruit to be preserved.

[*Price 4d.*]

The principal novel feature and the main difference of the present method, as compared with those formerly employed, will thus be seen to consist in at once closing, by means of a solid plate or disc of non-porous material, the said jar and at the same time hermetically sealing or cementing the adjoining surfaces of both, this being done while the fruit or other article of food in the jar is yet in a heated state the object being thus to form and to maintain within the said jar, a vacuum or partial vacuum sufficient to prevent the contents from spoiling. As the contents of the jar become cool, the vacuum within the jar will draw the plate or disc so tightly against the upper edge of the said jar, that it will even be found difficult afterwards to remove the said disc or plate again from the top of the jar, this being rendered possible often only by drawing or sliding the said plate or disc off in a lateral direction.

Having now particularly described and ascertained the nature of our said Invention and in what manner the same is to be performed, we declare that what we claim is :—

The method of preserving fruit and other articles of food by covering the jars containing the said fruit or other article of food, while the latter is still in a heated state, with a plate or disc of non-porous solid material and hermetically sealing or cementing the one to the other so as to create and to maintain unchanged within the said jar a vacuum or partial vacuum and thus to prevent the said fruit or other article of food from spoiling, without any further manipulation, substantially as and for the purpose specified.

Dated this 15th day of July 1887.

HASELTINE, LAKE & Co.,
45, Southampton Buildings, London, W.C.,
Agents for the Applicants.

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